

of a manufacturer's maintenance manual or Instructions for Continued Airworthiness shall perform the inspection or other maintenance in accordance with that section, or in accordance with operations specifications approved by the Administrator under Parts 121, 123, or 135, or an inspection program approved under § 91.409(e).

[Amdt. 43–20, 45 FR 60183, Sept. 11, 1980, as amended by Amdt. 43–23, 47 FR 41086, Sept. 16, 1982; Amdt. 43–31, 54 FR 34330, Aug. 18, 1989; Amdt. 43–37, 66 FR 21066, Apr. 27, 2001]

§ 43.17 Maintenance, preventive maintenance, and alterations performed on U.S. aeronautical products by certain Canadian persons.

(a) *Definitions.* For purposes of this section:

Aeronautical product means any civil aircraft or airframe, aircraft engine, propeller, appliance, component, or part to be installed thereon.

Canadian aeronautical product means any civil aircraft or airframe, aircraft engine, propeller, or appliance under airworthiness regulation by the Canadian Department of Transport, or component or part to be installed thereon.

U.S. aeronautical product means any civil aircraft or airframe, aircraft engine, propeller, or appliance under airworthiness regulation by the FAA, or component or part to be installed thereon.

(b) *Applicability.* This section does not apply to any U.S. aeronautical products maintained or altered under any bilateral agreement made between Canada and any country other than the United States.

(c) *Authorized persons.* (1) A person holding a valid Canadian Department of Transport license (Aircraft Maintenance Engineer) and appropriate ratings may, with respect to a U.S.-registered aircraft located in Canada, perform maintenance, preventive maintenance, and alterations in accordance with the requirements of paragraph (d) of this section and approve the affected aircraft for return to service in accordance with the requirements of paragraph (e) of this section.

(2) A company (Approved Maintenance Organization) (AMO) whose system of quality control for the maintenance, alteration, and inspection of

aeronautical products has been approved by the Canadian Department of Transport, or a person who is an authorized employee performing work for such a company may, with respect to a U.S.-registered aircraft located in Canada or other U.S. aeronautical products transported to Canada from the United States, perform maintenance, preventive maintenance, and alterations in accordance with the requirements of paragraph (d) of this section and approve the affected products for return to service in accordance with the requirements of paragraph (e) of this section.

(d) *Performance requirements.* A person authorized in paragraph (c) of this section may perform maintenance (including any inspection required by § 91.409 of this chapter, except an annual inspection), preventive maintenance, and alterations, provided:

(1) The person performing the work is authorized by the Canadian Department of Transport to perform the same type of work with respect to Canadian aeronautical products;

(2) The work is performed in accordance with §§ 43.13, 43.15, and 43.16 of this chapter, as applicable;

(3) The work is performed such that the affected product complies with the applicable requirements of part 36 of this chapter; and

(4) The work is recorded in accordance with §§ 43.2(a), 43.9, and 43.11 of this chapter, as applicable.

(e) *Approval requirements.* (1) To return an affected product to service, a person authorized in paragraph (c) of this section must approve (certify) maintenance, preventive maintenance, and alterations performed under this section, except that an Aircraft Maintenance Engineer may not approve a major repair or major alteration.

(2) An AMO whose system of quality control for the maintenance, preventive maintenance, alteration, and inspection of aeronautical products has been approved by the Canadian Department of Transport, or an authorized employee performing work for such an AMO, may approve (certify) a major repair or major alteration performed under this section if the work was performed in accordance with technical data approved by the Administrator.

(f) No person may operate in air commerce an aircraft, airframe, aircraft engine, propeller, or appliance on which maintenance, preventive maintenance, or alteration has been performed under this section unless it has been approved for return to service by a person authorized in this section.

[Amdt. 43-33, 56 FR 57571, Nov. 12, 1991]

APPENDIX A TO PART 43—MAJOR ALTERATIONS, MAJOR REPAIRS, AND PREVENTIVE MAINTENANCE

(a) *Major alterations*—(1) *Airframe major alterations*. Alterations of the following parts and alterations of the following types, when not listed in the aircraft specifications issued by the FAA, are airframe major alterations:

- (i) Wings.
- (ii) Tail surfaces.
- (iii) Fuselage.
- (iv) Engine mounts.
- (v) Control system.
- (vi) Landing gear.
- (vii) Hull or floats.
- (viii) Elements of an airframe including spars, ribs, fittings, shock absorbers, bracing, cowlings, fairings, and balance weights.
- (ix) Hydraulic and electrical actuating system of components.
- (x) Rotor blades.
- (xi) Changes to the empty weight or empty balance which result in an increase in the maximum certificated weight or center of gravity limits of the aircraft.
- (xii) Changes to the basic design of the fuel, oil, cooling, heating, cabin pressurization, electrical, hydraulic, de-icing, or exhaust systems.
- (xiii) Changes to the wing or to fixed or movable control surfaces which affect flutter and vibration characteristics.

(2) *Powerplant major alterations*. The following alterations of a powerplant when not listed in the engine specifications issued by the FAA, are powerplant major alterations.

- (i) Conversion of an aircraft engine from one approved model to another, involving any changes in compression ratio, propeller reduction gear, impeller gear ratios or the substitution of major engine parts which requires extensive rework and testing of the engine.
- (ii) Changes to the engine by replacing aircraft engine structural parts with parts not supplied by the original manufacturer or parts not specifically approved by the Administrator.
- (iii) Installation of an accessory which is not approved for the engine.
- (iv) Removal of accessories that are listed as required equipment on the aircraft or engine specification.

(v) Installation of structural parts other than the type of parts approved for the installation.

(vi) Conversions of any sort for the purpose of using fuel of a rating or grade other than that listed in the engine specifications.

(3) *Propeller major alterations*. The following alterations of a propeller when not authorized in the propeller specifications issued by the FAA are propeller major alterations:

- (i) Changes in blade design.
- (ii) Changes in hub design.
- (iii) Changes in the governor or control design.
- (iv) Installation of a propeller governor or feathering system.
- (v) Installation of propeller de-icing system.
- (vi) Installation of parts not approved for the propeller.

(4) *Appliance major alterations*. Alterations of the basic design not made in accordance with recommendations of the appliance manufacturer or in accordance with an FAA Airworthiness Directive are appliance major alterations. In addition, changes in the basic design of radio communication and navigation equipment approved under type certification or a Technical Standard Order that have an effect on frequency stability, noise level, sensitivity, selectivity, distortion, spurious radiation, AVC characteristics, or ability to meet environmental test conditions and other changes that have an effect on the performance of the equipment are also major alterations.

(b) *Major repairs*—(1) *Airframe major repairs*. Repairs to the following parts of an airframe and repairs of the following types, involving the strengthening, reinforcing, splicing, and manufacturing of primary structural members or their replacement, when replacement is by fabrication such as riveting or welding, are airframe major repairs.

- (i) Box beams.
- (ii) Monocoque or semimonocoque wings or control surfaces.
- (iii) Wing stringers or chord members.
- (iv) Spars.
- (v) Spar flanges.
- (vi) Members of truss-type beams.
- (vii) Thin sheet webs of beams.
- (viii) Keel and chine members of boat hulls or floats.
- (ix) Corrugated sheet compression members which act as flange material of wings or tail surfaces.
- (x) Wing main ribs and compression members.
- (xi) Wing or tail surface brace struts.
- (xii) Engine mounts.
- (xiii) Fuselage longerons.
- (xiv) Members of the side truss, horizontal truss, or bulkheads.
- (xv) Main seat support braces and brackets.
- (xvi) Landing gear brace struts.